RELATIONAL DATABASE DRILL-DOWN CONVENTION AND REPORTING TOOL

Abstract of Disclosure

A reporting tool is provided for rapidly generating a linked set of drill-down reports of increasing levels of detail from a relational database. The reporting tool permits a client to define the linking relationships between reports using simple query language commands to generate a result set that includes (1) the sought-after data, and (2) metadata that identifies drill-down reports to be generated if related report elements are selected. The reporting tool passes the client-defined queries to a database engine, which returns a result set containing both the sought-after data and any metadata. The reporting tool then parses the result set for any metadata containing drill-down directives. The reporting tool then passes the sought-after data to a reporting application programming interface, which generates the pre-selected graphical representation (e.g., a pie chart, 3-D bar chart, cross-tabbed table) of the sought-after data, in a hypertext format. If an end-user selects one of the elements (e.g., pie slice, 3-D bar, cell) of the graphical object, the application programming interface reports the event to the reporting tool. The reporting tool maps the reported event to the associated data and the corresponding drill-down directive, if any. The reporting tool then invokes the report identified by the drill-down directive, using any parameters provided by the drill-down directive, in order to generate another result set and corresponding drill-down report.

Figures